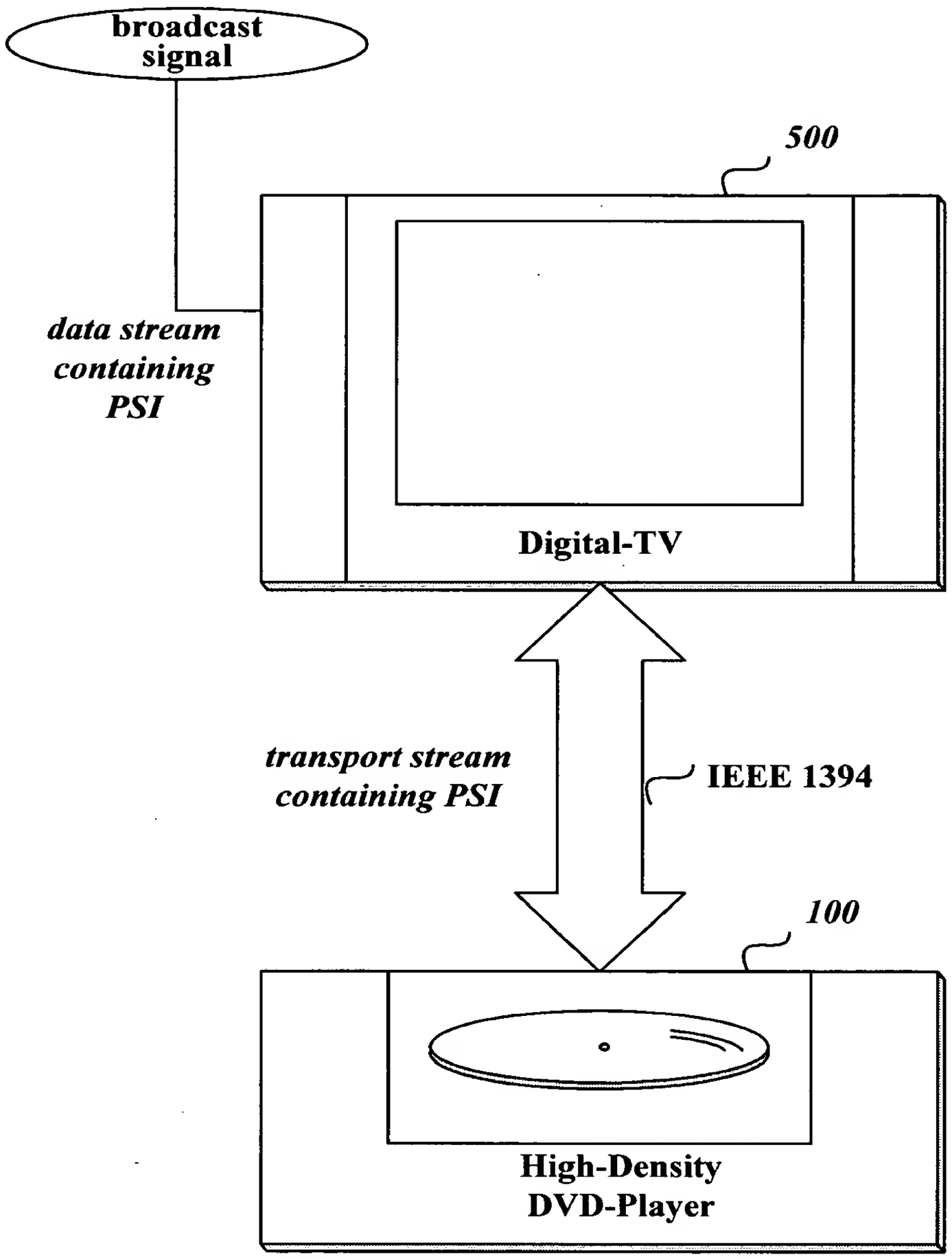
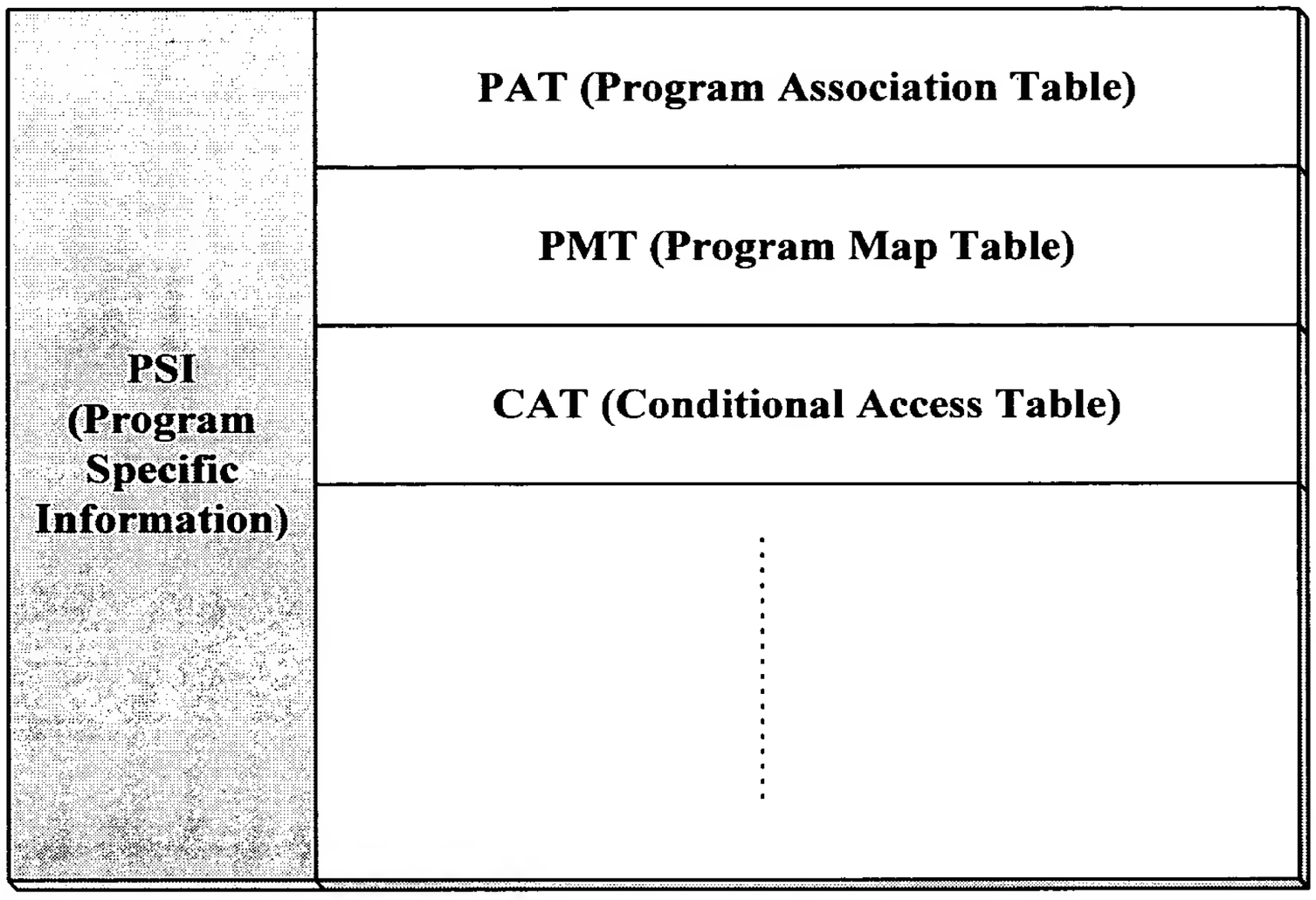
FIG. 1



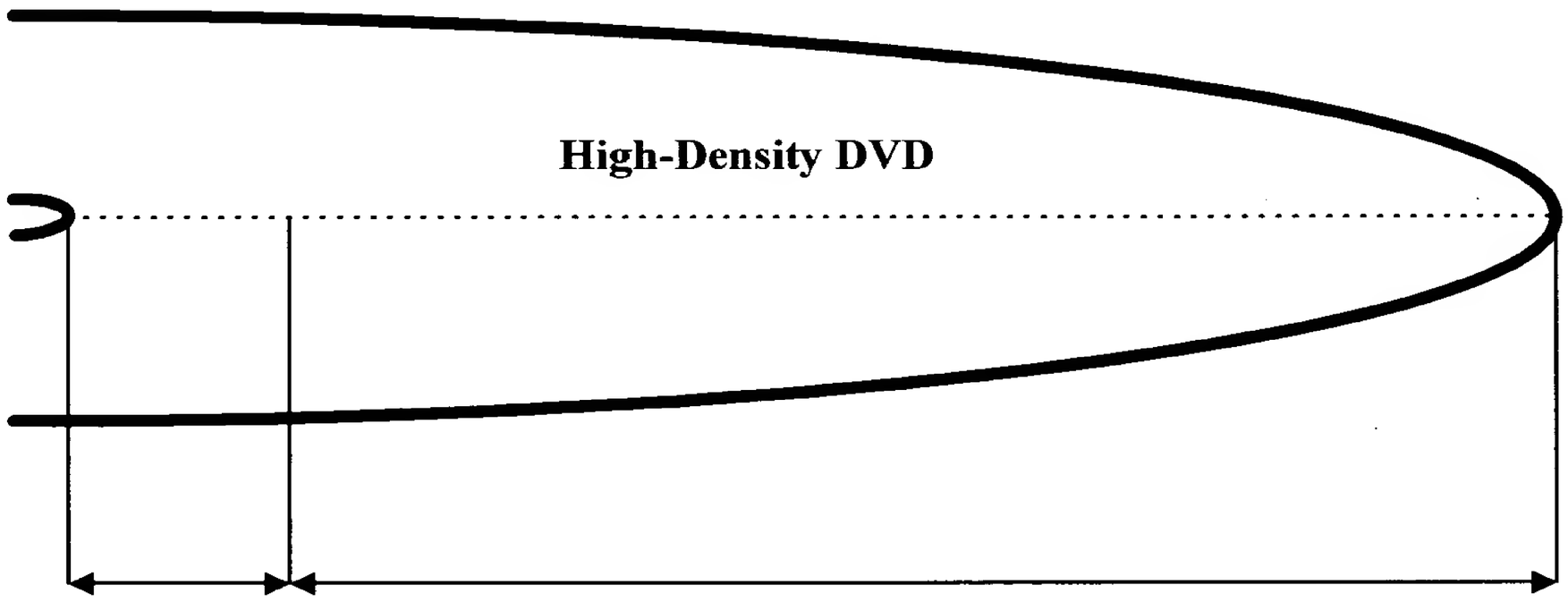
Conventional Art

FIG. 2



Conventional Art

FIG. 3



Conventional Art

FIG. 4

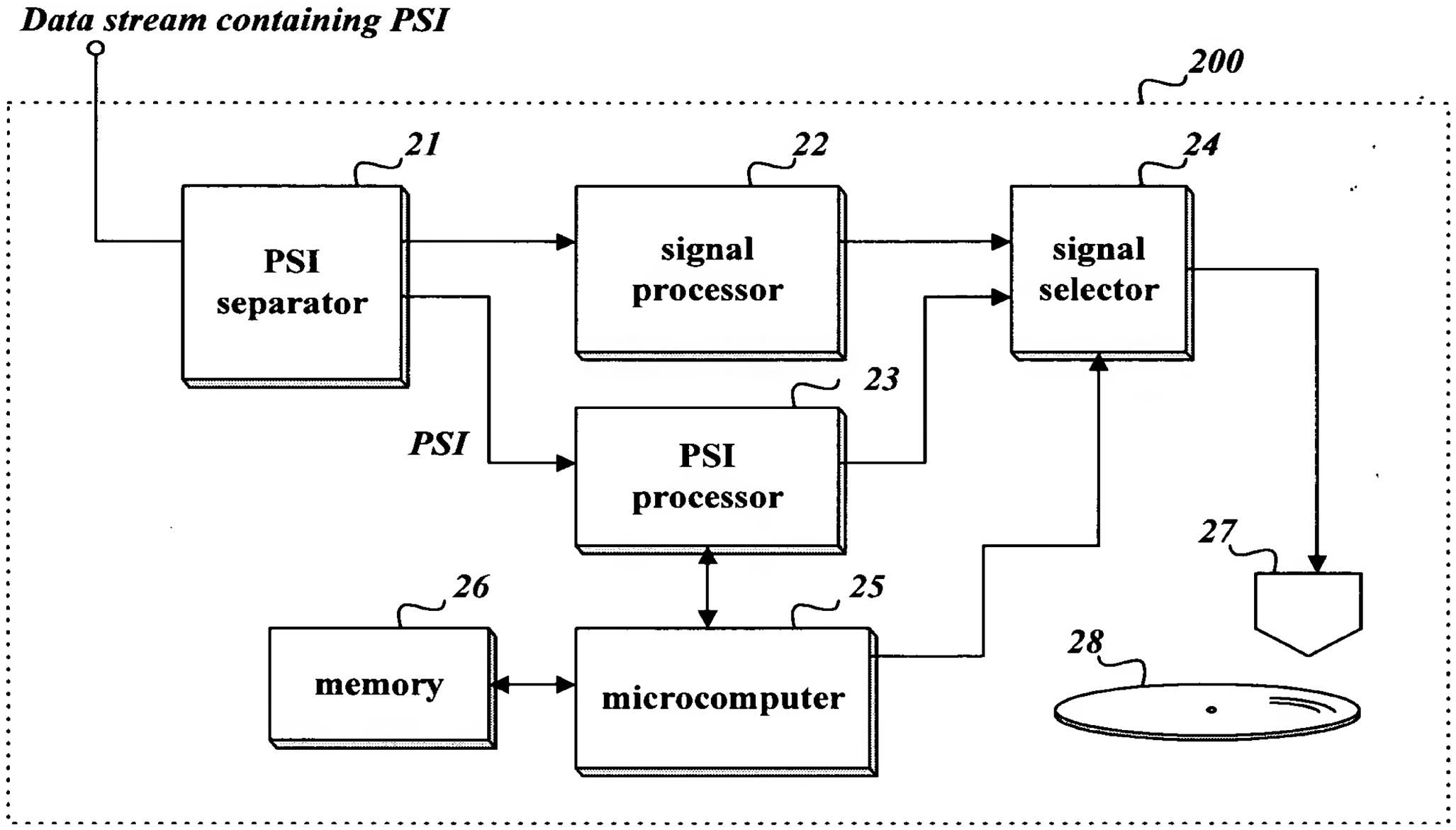

Data stream containing PSI
200
21
22
24
PSI separator
signal processor
signal selector
23
PSI
PSI processor
27
26
25
memory
microcomputer
28

FIG. 5

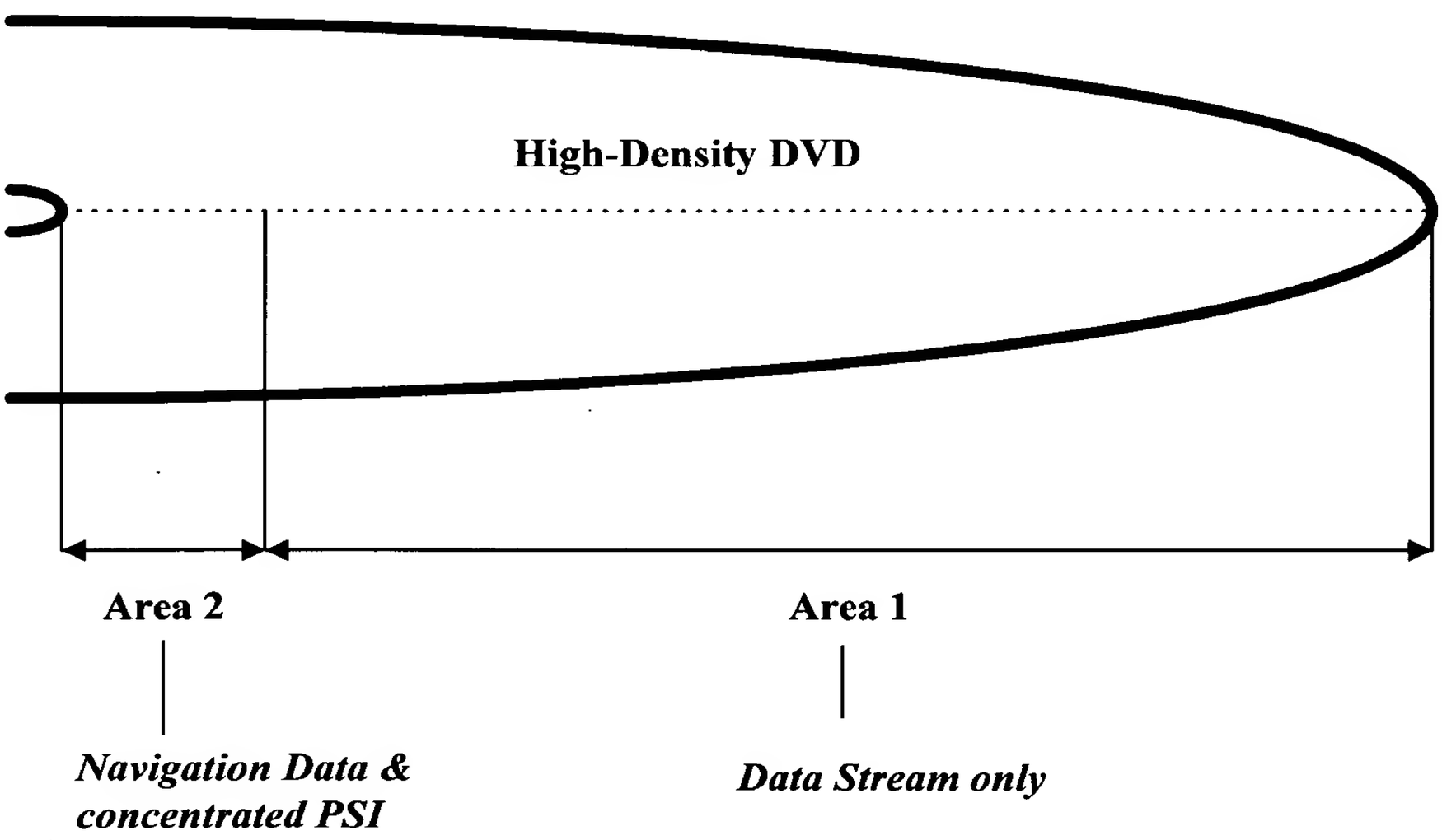

High-Density DVD
Area 2
Area 1
Navigation Data & concentrated PSI
Data Stream only

FIG. 6

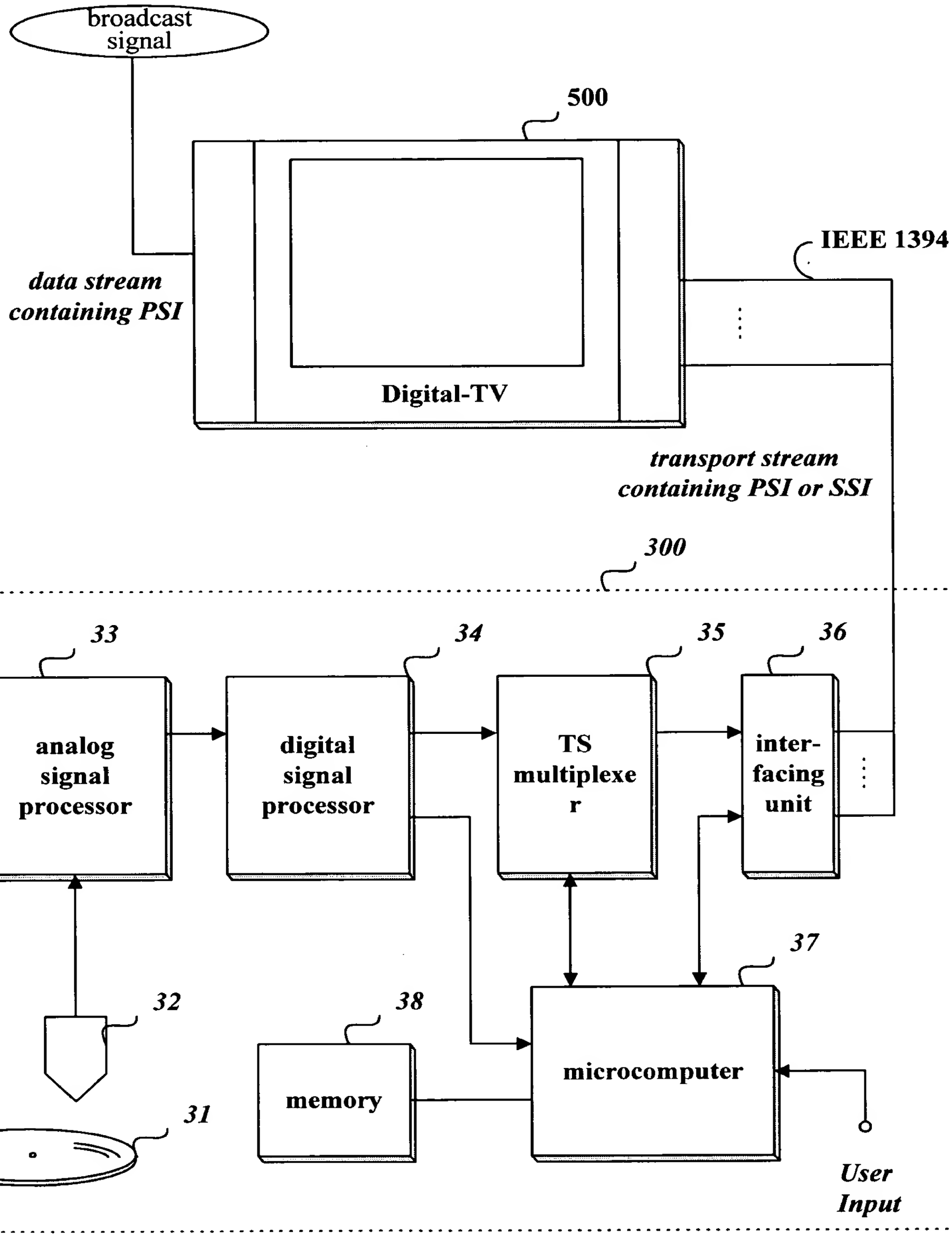

broadcast signal
500
IEEE 1394
data stream containing PSI
Digital-TV
transport stream containing PSI or SSI
300
33
34
35
36
analog signal processor
digital signal processor
TS multiplexe r
inter- facing unit
37
32
38
memory
microcomputer
31
User Input

FIG. 7

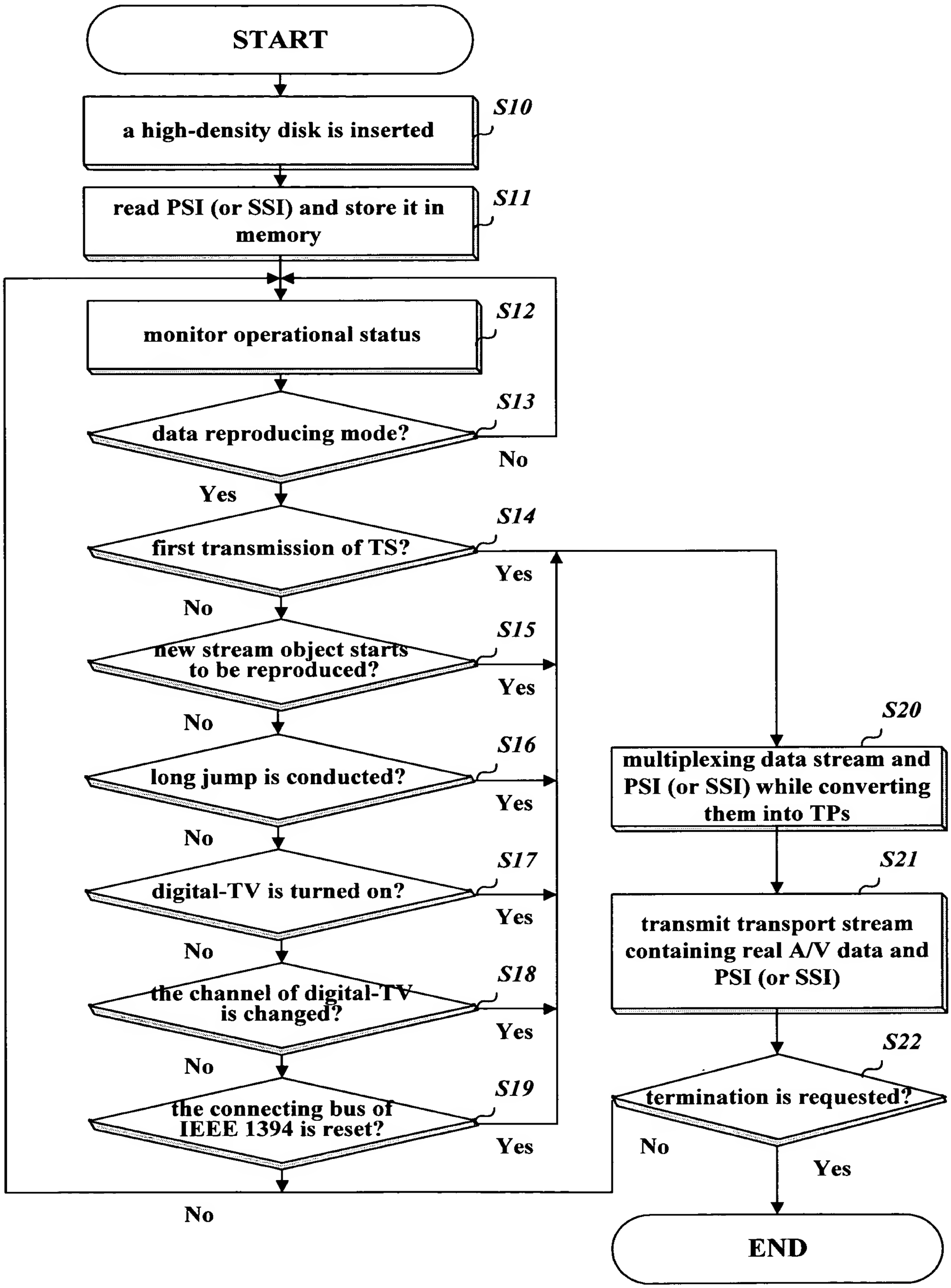
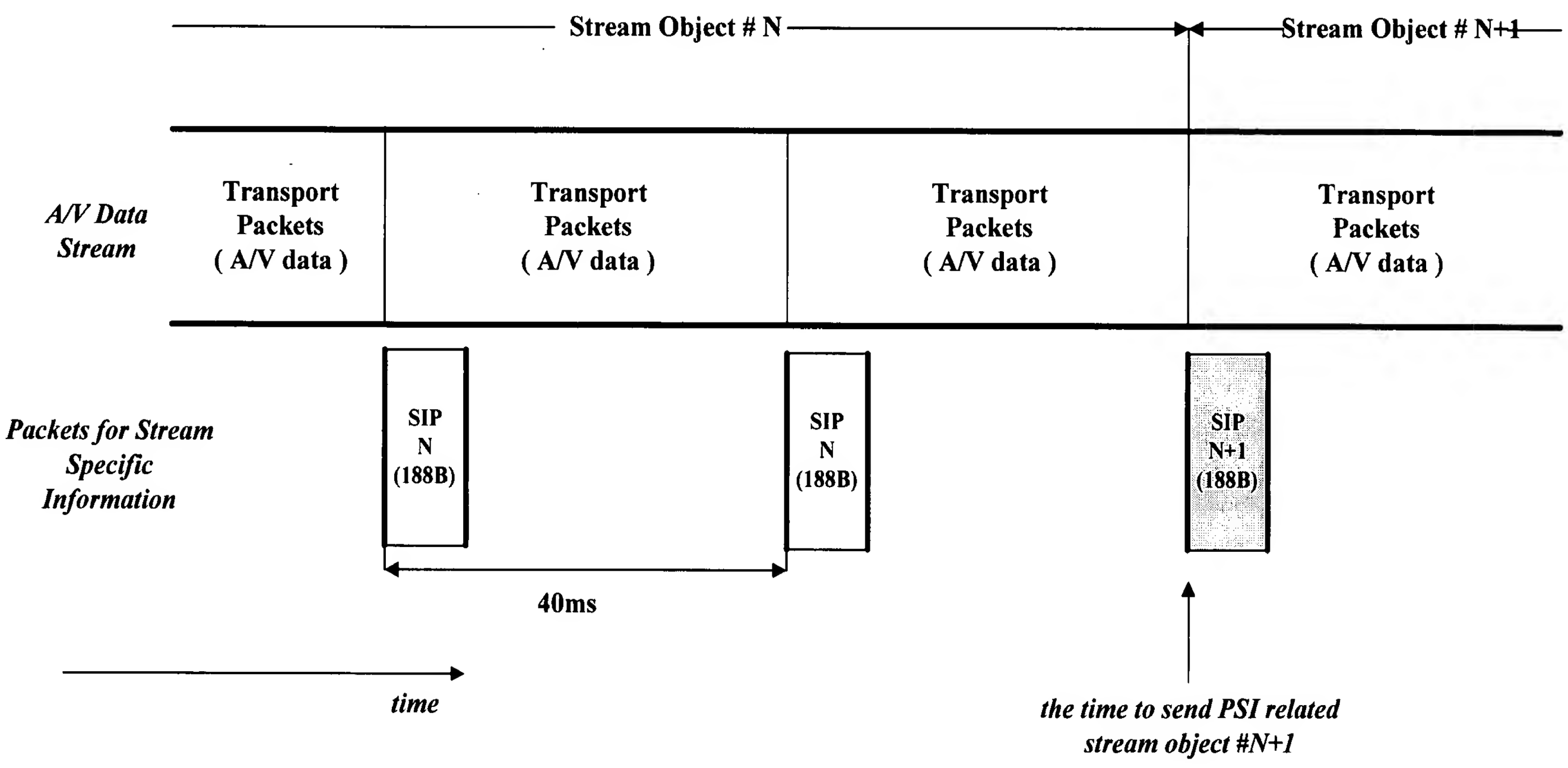

START
a high-density disk is inserted
S10
read PSI (or SSI) and store it in memory
S11
monitor operational status
S12
data reproducing mode?
S13
No
Yes
first transmission of TS?
S14
Yes
No
new stream object starts to be reproduced?
S15
Yes
No
long jump is conducted?
S16
Yes
No
digital-TV is turned on?
S17
Yes
No
the channel of digital-TV is changed?
S18
Yes
No
the connecting bus of IEEE 1394 is reset?
S19
Yes
No
multiplexing data stream and PSI (or SSI) while converting them into TPs
S20
transmit transport stream containing real A/V data and PSI (or SSI)
S21
termination is requested?
S22
No
Yes
END

FIG. 8


Stream Object # N
Stream Object # N+1
A/V Data Stream
Transport Packets (A/V data)
Transport Packets (A/V data)
Transport Packets (A/V data)
Transport Packets (A/V data)
Packets for Stream Specific Information
SIP N (188B)
SIP N (188B)
SIP N+1 (188B)
40ms
time
the time to send PSI related stream object #N+1